

IN THE CLAIMS

A¹
1. (Original) A method for affixing two substrates to one another using a non-epoxy glue sealant containing photoinitiators, the method comprising the steps of:

applying a non-epoxy glue sealant along an outer periphery of a first substrate;

placing a second substrate onto the first substrate containing the non-epoxy glue sealant; and

irradiating the glue sealant with laser beam radiation to polymerize the sealant by directing light onto one of the first or the second substrate that is at least partially transparent to the laser beam.

2. (Original) The method of claim 1, wherein the step of irradiating the glue sealant includes irradiating the glue sealant with laser beam radiation to polymerize the sealant by activating the photoinitiators.

3. (Original) The method of claim 1, wherein the step of irradiating the glue sealant includes irradiating the glue sealant with laser beam radiation that is incident onto one of first or the second substrate, so that the laser beam radiation subtends an angle near normal to the first or the second substrate receiving the laser beam irradiation, the beam irradiation passing through the first or the second substrate onto the non-epoxy glue sealant.

4. (Original) The method of claim 1, wherein the step of irradiating the glue sealant includes irradiating the glue sealant with laser beam irradiation that is incident onto one of the first or the second of the two the substrates, so that the laser beam subtends an angle at non-normal incidence with respect to the first or the second substrate receiving the laser beam radiation, enabling the laser

directed onto the first or the second substrate to pass through the first or the second substrates onto the non-epoxy glue.

5. (Original) The method of claim 1, wherein the step of irradiating the glue sealant includes irradiating the glue sealant with laser beam irradiation from a pulsed laser.

6. (Original) The method of claim 1, wherein the step of irradiating the glue sealant includes irradiating the glue sealant with laser beam irradiation from a continuous (CW) laser.

7. (Original) The method of claim 5, wherein the step of irradiating the glue sealant includes irradiating the glue sealant with laser beam irradiation from a pulsed laser with a wavelength range 200-1500 nm.

8. (Original) The method of claim 5, wherein the step of irradiating the glue sealant includes irradiating the glue sealant with laser beam irradiation from a continuous (CW) laser with a wavelength range 200-1500 nm.

Claims 9 – 11 (Canceled)

12. (Currently Amended) A~~The method on a LCD (Liquid Crystal Display of claim 1, wherein the first substrate and the second substrate form a LCD (Liquid Crystal Display) panel structure assembled according to an ODF (One Drop Fill) comprising: and~~
wherein the non-epoxy glue sealant is applied using~~assembling a first substrate and a second substrate forming a LCD panel using an ODF method with a non-epoxy glue sealant; and~~
wherein the irradiating of the non-epoxy glue sealant with a the laser beam includes~~to providing~~ a UV (Ultraviolet) dosage into the non-epoxy glue sealant within the LCD panel of not less than 0.02 J/cm².

13. (Original) The method of claim 12, wherein the step of irradiating the non-epoxy glue sealant with a laser includes irradiating with a laser with pulse widths in the range from femto-seconds to continuous wave.

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14. (Original) The method of claim 12, wherein the step of irradiating the non-epoxy glue sealant with a laser includes irradiating with a laser at an impingement angle off of normal to the LCD panel so as to supply a UV dosage of not less than 0.02 J/cm^2 under any blocking images within the LCD panel.

15. (Original) The method of claim 12, wherein the step of irradiating the non-epoxy glue sealant with a laser includes irradiating with a laser to expose photo initiators in the non-epoxy glue sealant to take less time to cure than a thermal bake of the non-epoxy glue sealant using thermal initiators.

16. (Original) The method of claim 15, wherein the step of irradiating the non-epoxy glue sealant with a laser includes irradiating with a laser to expose the photo initiators in the non-epoxy glue sealant so as to minimize heat build up by reducing the necessary activation of thermal initiators, thus eliminating any mixing of the non-epoxy glue sealant and liquid crystal material.

17. (Original) The method of claim 12, wherein the step of irradiating the non-epoxy glue sealant with a laser includes irradiating with a laser to expose the photo initiators in the non-epoxy glue sealant from the laser using a back side of the LCD panel, wherein the backside of panel contains no blocking images.

18. (Original) The method of claim 12, wherein the step of irradiating the non-epoxy glue sealant with a laser includes irradiating with a Q-Peak pulsed laser.

19. (Original) The method of claim 12, wherein the step of assembling a first substrate and a second substrate forming a LCD panel using an ODF method with a non-epoxy glue sealant includes forming a LCD panel using an epoxy-acrylate glue sealant.

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20. (Original) The method of claim 12, wherein the step of irradiating the non-epoxy glue sealant with a laser includes irradiating with a continuous (CW) laser.

21. (Original) The method of claim 12, wherein the step of irradiating the non-epoxy glue sealant with a laser includes irradiating with laser at a wavelength range of 200-1500 nm.

22. (Original) The method of claim 12, wherein the step of irradiating the non-epoxy glue sealant with a laser includes irradiating with a continuous laser at wavelength range 200-1500 nm.

23. (Original) The method of claim 12, wherein the step of irradiating the non-epoxy glue sealant with a laser includes irradiating with a laser controlled by a servo to trace out the pattern of the non-epoxy glue sealant to deliver not less than 0.02 J/cm^2 to the non-epoxy glue sealant.

24. (Original) The method of claim 12, wherein the step of irradiating the non-epoxy glue sealant with a laser includes irradiating with a laser providing a beam which is directed by scanning mirrors to deliver not less than 0.02 J/cm^2 by directing the laser beam to trace out the pattern of the non-epoxy glue sealant.